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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/900,838	07/06/2001	Yunzhang Wang	2183A	5208

7590 05/20/2003
Milliken & Company
P.O. Box 1927
Spartanburg, SC 29304

EXAMINER

ILAN, RUTH

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 05/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/900,838

Applicant(s)

WANG ET AL.

Examiner

Ruth Ilan

Art Unit

3616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-130 is/are pending in the application.
- 4a) Of the above claim(s) 21-66, 68-115 and 117-127 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20, 67, 116 and 128-130 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group II and Species I in Paper No. 7 is acknowledged.
2. The Examiner disagrees with Applicant's statement regarding which claims read on the elected species. Claim 21 recites, in line 11-12, "at least one tether attached between said first and second panels near the center thereof and having at least one vent opening in the side thereof". This limitation of the vent opening in the tether is only disclosed in Figure 10, which is part of Species VI. As such it is the Examiner's position that claims 21 and those claims that depend from it, 22-66, 68, 70, and 78-115 are not directed to the elected species. Additionally, claims 73, 76, 77, and 118 include the limitation of the vent in the tether, which is only disclosed in Figure 10. Claims 72 and 117 are directed to embodiments including rip stitching, which is not disclosed anywhere in the specification, and as such not included in the elected embodiment. Regarding claims 123-125, the embodiments including body panels were not elected. Regarding claims 126 and 127, the limitation of the second chamber receiving gas through a gas permeable fabric is only disclosed with relation to Figure 17 and 18, and as such not elected. Additionally, regarding claim 74, the passenger side air bag is shown in Figure 17 and as such not elected. Regarding claim 75, no side impact air bag is disclosed in any of the Figures, and as such is not elected.
3. In summary, claims 21-66, 68-115, and 117-127 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species,

there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 7.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the various claimed effective material usage factors as claimed in claims 1-5, and the various square meters of material, as claimed in claims 8-14 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to because it is not clear what the numbers along the side of the fabric layouts in Figures 6, 7, 32, 33, 34, 35, 36,39, and 40 are intended to reference.

Specification

6. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

7. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: There is no mention in the specification of the various

claimed square meters of material in claims 8-12. Additionally, there is insufficient evidence of reduction to practice for the claimed material usage factors in claims 1-7, please see the 112 1st and 2nd paragraph rejections below.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Regarding claims 1-7, there is no support in the specification for the variously claimed material usage factors. While the volume of the airbag is provided (on page 23) there is no indication of the amount of material used for each of the species. If the numbers on the edges of the Figures are in millimeters, (which is just a guess, see for instance Figure 6.) then it is unclear how any of the air bags use less than 2 or 1 square meters of material, as claimed in claims 11 and 12. Clarification is required.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 1-14, 16, 18-20, 67, 116 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The use of the term "effective material usage factor" in claims 1-5 is unclear, in part because there is very little disclosure associated with the term. Is the effective material usage factor intended to include all the fabric used, including the waste, or just the material contained in the finished air bag? If the waste is included, then the claim is really directed to a method of making the air bag, and not the apparatus. It is unclear if a method or an apparatus is intended. For the purposes of examination, it will be assumed that an apparatus is intended. Regarding claims 8-14, the same issue regarding waste is also present. Further, regarding claims 1-14, since there is so little disclosure regarding the usage factor and the amount of material used, it is unclear if the elected species includes these limitations. Regarding claim 16, claim 16 recites "the third panel" in line 1, and "the outer surface" in line 2. There is insufficient antecedent basis for these limitations in the claims. Regarding claims 18 -20 it is not known what is intended by "at least one of " coated and uncoated fabric. Does it mean that the fabric is coated, but can also be uncoated? Claim 67 is extraordinarily problematic. First of all, all comparisons are to a "conventional" single chamber air bag, and since there are all sorts of single chamber air bags, the metes and bounds of this limitation are unknown. Second of all "reduced", "smaller", "faster", "softer", and "slower" are all relative terms which renders the claim indefinite. These terms are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art

would not be reasonably apprised of the scope of the invention. Additionally, it is unclear how one can compare the characteristics of primary and secondary chambers to an air bag that has a single chamber. Regarding claim 116, line 6, after "other of said", the words "second and third" should be inserted to add clarity.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

13. Claims 1-7, 15-20 and 67 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakai et al. (JP 409188218.) Sakai et al. (Figure 8, 15, or 11) teaches an air bag with first and second panels (111,112) and an additional chamber formed by a third panel (12) attached to a central portion of the second panel and at least one vent hole (5) in the second panel to provide gas to the second chamber (see Figure 8.) The vent hole is located under the third panel. Regarding claim 17, the embodiment in Figure 15 teaches the tethers (71) and concave portion of the second panel. Regarding claims 18-20, the fabric is either coated or uncoated. Regarding claim 67, as best understood, some benefit is achieved. Regarding claims 1-7, as best understood, since the disclosure is so minimal, the prior art air bag of Sakai et al. is essentially identical to the air bag disclosed, and as such it is the Examiner's position that the material usage factor, that is the ratio of the material used to make the bag to the volume of the inflated

bag is the same in the prior art bag and the claimed bag. When the applicant claims an operation of a device not specifically disclosed in a prior art reference, the USPTO "possesses the authority to require the applicant to prove that the subject matter shown in the prior art does not possess the characteristics relied on." In re Ludtke and Sloan, 169 USPQ 563,566 (C.C.P.A. 1971.) The applicant is required to prove that the air bag shown does not inherently include the same material usage factor, since it is essential the same shape as the claimed and disclosed air bag.

14. Claims 67 and 116 are rejected under 35 U.S.C. 102(b) as being anticipated by Nishijima et al. (GB 2 334 492 A.) Nishijima et al. (Figure 1) teaches an air bag with a first panel having a central gas opening (48) and at least one vent hole (58) and a second panel (43) having substantially the same dimensions and being attached to the first panel along the edge (44) and a third panel (41) having dimensions equal to the second panel and being attached along the edge, the third panel covers at least one vent opening (51) in the second panel, and the secondary chamber (46) receives gas from the primary chamber through the vent opening. Regarding claim 67, as best understood, some benefit is achieved.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 8-14 and 128-130 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakai et al. (JP 409188218.) Sakai et al. is discussed above and teaches all elements of the claimed invention except for the specific sizes of the cloth and the gas permeability of the cloth. It would have been obvious to one having ordinary skill in the art at the time of the invention to make the air bag of any size as an obvious matter of design choice, since the applicant has not disclosed any of these sizes as having a particular purpose. Additionally, it has been held that a change in size involves only routine skill in the art. *In re Rose*, 105 USPQ 137. Regarding claims 128-130, the Examiner takes Official Notice that it is old and well known in the air bag art to use gas permeable material on multichamber airbags in a variety of locations. This fabric is generally used to control gas flow both between chambers and as venting out of the bag. It would have been obvious to one having ordinary skill in the art at the time of the invention to use gas permeable fabric as the first or second panel of Sakai et al. in order to aid the flow of gas between the primary and secondary chambers, and additionally in order to control the flow of gas out of the bag and influence the hardness of the bag on impact.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kamitsuma, Sakai et al. (JP 409188216 A and JP 409188217 A) Onishi et al., Rudolf et al., Satoh, Fowler et al., Bosbieter et al., Hashimoto et al., Waldenchen et al., Hill, and Kishi et al. teach multichamber air bags of interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth Ilan whose telephone number is 703-306-5956.

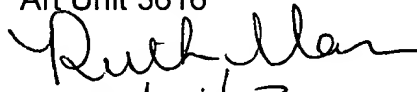
The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

RI
May 14, 2003

Ruth Ilan
Examiner
Art Unit 3616



5/14/03